

The Times and Register.

VOL. XXIX. No. 12.

PHILADELPHIA, MARCH 23, 1895.

WHOLE No. 863.

Original.

NEW REMEDIES IN DERMATOLOGICAL PRACTICE.

BY LOUIS LEWIS, M. D.

Within the past few months I have had opportunities for testing the merits of three conspicuous proprietary preparations, and have secured such satisfactory evidence of their worth in their respective roles that I feel justified in printing my experience in a general way. They present many distinct advantages over the older applications, and bear flattering testimony to the advance of scientific pharmacy. I refer to the compounds of iodine with coal tar derivatives, named europhen, aristol and losophan, all of which are highly serviceable in the treatment of various lesions of the skin, including those due to specific disease.

Quite a number of cutaneous eruptions are but the outcome of deeper troubles within the system, dependent on disorder of non-cutaneous organs, and may act as media for the removal of substances inimical to the human body. This is exemplified by the questionable advantages of a too hasty cure in many herpetic affections. Chronic catarrh of the bladder will often be ameliorated by the supervention of an attack of shingles. Asthma is sometimes relieved on the accession of an eruption of psoriasis. Extensive patches of erythema fugax disfigure the face as dyspepsia yields to treatment; and wheals of urticaria announce the subsidence of certain gastric irritations. Phthisis may be delayed in its progress by a carbuncle. Sugar is sometimes diminished in diabetic urine on the

appearance of eczema or pruritus about the genitals, more especially at the climacteric period. A disordered mental condition has found relief from the sudden happening of a squamous eruption on the scalp. The skin would seem to be nature's chosen organ for the accomplishment of crises that attend the breaking up of many chronic diseases, as well as a means of exit for systemic poisons.

The above little digression has reference to instances in which too precipitous healing might possibly be hurtful, or at least inexpedient; but in the large majority of lesions and eruptions of the skin the speediest possible cure is advisable, and topical treatment of the first importance. Of course the exanthemata are excluded; they must be treated by remedies affecting the system at large.

The preparations herein advocated have a wide range of usefulness, owing to their adherence to the surface when applied as powder, and to their antiseptic, anesthetic and cicatrizing properties. Moreover, they are harmless; and, if not all, entirely odorless, they are at least free from the repugnant qualities of their common predecessor, iodoform.

Europhen is an iodized substitution-product of iso-butyl-cresol, resulting from the action of iodine (dissolved in potassium iodide), on a watery alkaline solution of iso-butyl-orthocresol. It is an orange-yellow powder, of cinnamonic odor, containing 27 per cent. of iodine. The latter is continuously separated in minute particles wherever moisture is present, and so contributes to the

arrest of germ growths; and the presence of cresol, a coal-tar product, likewise adds to its antiseptic properties. I have witnessed its good effects as a dusting powder in various skin diseases; for instance, in chronic weeping eczema, seborrhea, impetigo, psoriasis of catarrhal character, and Pityriasis pilaris. It is useful in ozena, syphilitic otorrhea, hay asthma and nasal catarrh, used through an insufflator, and is beneficial in chilblains, boils and onychia as an ointment. For soft chancres, herpes preputialis, condylomata, balanitis and the hard initial lesions of syphilis, I have found nothing so appropriate or more incisive in action, a week or even less being often sufficient to heal them. All forms of ulceration are benefited by its use, except in the very acute stage. In a case of obstinate leucorrhea coming from the glands of the cervix its speedy success by insufflation was phenomenal; for almost every known application had failed to effect a cure, though temporary relief was afforded during treatment. Europhen should be helpful in all local affections that derive benefit from any iodine compounds or coal-tar derivatives. I have used it mostly in the form of powder; but it is equally effective as an ointment with lanolin or dissolved in collodion, oils, or ether, in cases where the powder might be inconvenient or inapplicable. As europhen has been already lauded by numerous practitioners with ampler clinical facilities I feel it almost superfluous to add my testimony; and I am confident it will elbow its own way into general favor, not only by reason of its intrinsic value, but also on account of its many advantages over iodoform, which should be relegated to the realms of pharmaceutical desuetude. The days of its odorous notoriety are surely numbered, whereas europhen offends not the nose. "Le roi est mort, vive le roi."

Aristol is an iodide of thymol, produced by the action of a watery solution of iodine in iodide of potassium on a similar solution of thymol in the presence of caustic potash. It is a pinkish heavy powder, holding about 45 per cent. of iodine; is soluble in ether, chloroform and

collodion; and extremely so in oils. It is remarkable for its adherence to surfaces (like europhen and losophan), and for its command over suppurative and ulcerative processes. Aristol is applied in powder, in ethereal or oily solution, or in collodion, lanolin or vaselin. It is a good application to all ulcers, whether simple or specific, and, dissolved in collodion, it provides a protective covering for erythematous and erysipelatous eruptions. As a general substitute for iodoform I would give my preference to europhen; as a wound-dressing and in the treatment of burns, bed-sores, some ulcerating syphilitic lesions and parasitic skin diseases, aristol is perhaps the better. The two powders, combined in equal proportions, will heal syphilitic sores that have been rebellious to either one of them when employed alone. Aristol has rendered good service in lupus and epithelioma; it is counted little short of a specific in some forms of eczema; it is of value in tinea, sycosis and mycoses, and it furnishes a satisfactory remedy for scabies.

Losophan is produced by the action of iodine upon m-oxytoluic acid in the presence of alkali, and is a triiodo-cresol. It is a white impalpable powder, practically inodorous, and contains 80 per cent. of iodine. I have had less chance to test its uses than europhen and aristol, but am assured it is of specific value in fungoid and parasitic affections, and of general utility as a dusting powder for ulcers. Acne, prurigo, eczema, pityriasis and herpes tonsurans are said on good authority to be amenable to losophan; and its use in the form of a 10 per cent. ointment is recommended in the treatment of scabies and sycosis.

2011 Arch street, Philadelphia.

Koch's comma bacillus, while the most common micro-organism found in cholera patients, is now said to be known to swarm in the intestinal canal of man without causing cholera. Some bacteriologists think that another microbe must be associated with it to give it the power for evil it seems to possess in such cases.

LOCAL ELECTROLYSIS AND ZINC-AMALGAM CATAPHORESIS IN MALIGNANT AND NON-MALIGNANT TUMORS.

BY G. BETTON MASSEY, M. D.,

Before reporting the three cases on which this new treatment of morbid growths is mainly based I must explain what I mean by local electrolysis and zinc-amalgam cataphoresis, and also advance reasons for my belief that these methods either separately or together present important advantages over cutting operations in certain cases of benign vascular growths and incipient cancers.

Local electrolysis means simply that the electrical decomposition of the tissue salts is confined to a localized area by the approximation of the poles. If both poles of a galvanic current be placed in the morbid tissue quite near each other the bulk of the current will be concentrated within the portion of tissue immediately between them, and but little will traverse the outside healthy parts. In practice they should not be further apart than from a half to one inch, though this depends entirely on the strength of current to be used and the size of the growth. So placed, an enormous current may be employed to dissolve a morbid tissue without affecting surrounding tissues, the parts having been chilled by a spray, or otherwise rendered anesthetic, if sensitive. The surgical possibilities of such currents are quite remarkable. All the salts and liquids of a given growth lying between the points become a prey to such a current, the watery contents being turned into oxygen and hydrogen gases, and the complex salts into solutions of acids and alkalines. This is, of course, attended with a material rise of temperature, but nothing like charring. If the tissue subjected to the process is soft and vascular, or juicy, there will be very little left between the poles after the gas has been given off but the acids and alkaloids dissolved in a turbid liquid remainder. If the tissue is

tougher and more fibrous a gristly residue will be found which can be detached or left to be detached by nature.

The strength of current required to destroy tissue in this way depends altogether on its concentration at the active spot. A minute reproduction of the process occurs when we supply but two or three milliamperes to the papilla of a hair sheath, or to a mole on the skin; but to completely dissolve tissue between two or more needles a half inch apart requires at least four hundred to seven hundred milliamperes.

Whether this portion of my method has any advantages over a cutting operation in removing malignant or non-malignant external growths depends upon circumstances. It is clearly inapplicable to any growth within the body unless it is situated in a drainable natural cavity, as a considerable quantity of detritus must drain away. It also presents the disadvantage of not permitting healthy tissues to be united at once over the seat of the removed growth, a procedure, however, that is often a doubtful utility, as it frequently covers up portions of the disease that failed to be removed. The advantages of the method over the knife are, on the other hand, by no means inconsiderable. It is absolutely bloodless, no matter where applied, thus enormously conserving strength after operations notoriously bloody; the edges of the undestroyed tissue remain non-absorbent, lessening risk of sepsis; and finally there seems to be some property in the galvanic current to cause a retrogression of the whole of a benign growth even when but a portion is directly acted on, as in Apostoli treatment of fibroids and the ordinary treatment of moles and other small skin tumors.

If the growth be a benign one the application described will probably cover the whole of the active treatment. If it be malignant, on the contrary, the second portion of the method—zinc-amalgam cataphoresis—is employed, a procedure of great value in radically removing all remaining traces of a still localized cancerous growth.

Zinc-amalgam cataphoresis is electrically mono-polar, the single active electrode, which is always positive, being applied to the cavity left by removal of the greater portion of the growth, while the indifferent or negative electrode, in the shape of large conducting pads connected together, is placed on any convenient portion of the body. The active electrode is a freely-amalgamated zinc surface of one or two square centimetres area, which is held successively against all portions of the bottom and edge of the excavation. From 150 to 300 millamperes are sufficient, the pain being controlled by cocaine in solution placed in the excavation beneath the electrode, to be conveyed into the tissues simultaneously with the nascent oxychloride of zinc and mercury which is dissolved from the electrode by electrolysis.

By this procedure we search out and destroy all remaining spurs and paths of infection in the contiguous unhealthy and healthy tissues, the current seeking vascular and cellular paths of less resistance by preference in its journey to the other pole; and to the lethal effect of the current we add the well-known lethal effects of nascent mercury and zinc compounds. The surface of the amalgamated zinc electrode is consumed in the process—the mercury as well as the zinc—producing a mixed infiltration of the immediate polar region that is readily detected by the eye. **Low organisms** in the immediate neighborhood of the electrode quickly succumb, and the antiseptic value of the procedure is shown in the correction of any odors that may have accompanied the cancerous discharge. That the action is not confined to the immediate neighborhood of the electrode was well demonstrated in one case in which the zone-like base of a cancer was observed to lose its induration and shrink in places at least an inch distant from the contact point.

The applicability of the first portion of the method—local electrolysis—to a benign growth was shown in the following case:

Case 1. Large intra-uterine cystic fibroid destroyed piecemeal by re-

peated applications of bipolar local electrolysis, resulting in a satisfactory cure.—Mrs. D., a nullipara, aged 39 years, was referred to me by Drs. Hemminger and Bixler, of Carlisle, Pa., in September, 1892. Six or seven years previously Dr. Hemminger had discovered an intra-uterine growth, the lower portion of which later was found to be projecting from the dilated os, giving rise to pain and hemorrhage. Efforts to remove the growth by the *ecraseur* were made by Dr. Hemminger, but, owing to its extensive internal attachment and great vascularity, only the projecting parts were removed. When the case was admitted to the Sanatorium the tumor was nearly the size of the adult head, the upper limit being even with the navel. The mass was symmetrical in shape, soft and semi-fluctuating. Examination showed the os fully dilated, through which projected a portion of the tumor the size of the fetal head. Around this projecting mass several fingers could be swept, showing freedom from adhesion to the uterus for three inches anteriorly and about six inches posteriorly. The mass was evidently a vasculo-cystic fibroid situated within the cavity of the uterus and attached to the uterine walls throughout three-quarters of its periphery. It was spongy, but very tough, bled easily, and gave rise to a copious watery leucorrhea. The conditions presented by this growth, particularly its cystic degeneration, absolutely contra-indicated the ordinary Apostoli treatment of fibroids on account of the danger of producing sepsis. I accordingly attempted its removal by morcellement, using the scissors, dull scalpel and fingers, but was compelled to desist, owing to the frightful hemorrhage. In this dilemma the possibilities of localized destructive electrolysis occurred to me, and it was begun by the use of a bipolar instrument having four prongs, two to each pole. These prongs were buried in the projecting portion of the tumor, and 700 millamperes turned on for six minutes. This dissolved quite a hole in the morbid tissues, making a spot too hot for the finger. The procedure was repeated daily as fresh portions of the

growth were pressed down by the contracting uterus, without hemorrhage or marked discomfort, the possibility of sepsis being guarded against by a continuous douche for an hour or more after each application. Three months were consumed in the eradication of the tumor in this way, though it doubtless could be done in a second case in a third of the time, the final examination showing nothing but a roughened spot on the anterior wall of the contracted uterus. External measurements now showed the upper limit of the uterus two and one-half inches below the navel. The cavity was capacious.

A letter from Dr. Bixler dated February 26, 1894, stated that the patient was quite restored to health, complaining only of prolapse of the vaginal walls, the latter doubtless due to the descent into the pelvis of a uterus that had so long been within the abdomen. The cavity was still large, and there was some thickening of the walls on both the right and left of the uterus. The os would only admit the first joint of the finger.

In November, 1894, two years after the patient's admission, her husband called and reported her as in good health.

Case 2. Sarcoma of tonsil and soft palate cured by local electrolysis, followed by zinc-amalgam cataphoresis.—W. H. L., blacksmith, aged 38 years, was also referred to me by Dr. Hemminger, February 17, 1893. Five years before he suffered from an abscess of the ear. Two years before being seen by me the left tonsil was found to be the seat of a tumor. He had recently been sent to the hospital of the University of Pennsylvania, where, he says, malignancy was diagnosed and an operation proposed, which he declined.

A tumor about the size of a goose egg filled the pharynx, involving the tonsil and soft palate, and threatening suffocation. Liquids could be swallowed with much difficulty.

The patient was placed on monopolar negative punctures, 30 to 60 milliamperes, daily. But little progress being apparent at the end of a week the parts were cocaineized and

subjected to bipolar local electrolysis with from 200 to 350 milliamperes, on two occasions. The separation of the eschar that resulted was accompanied by considerable pain and reaction, but as the place healed it was found that but little of the tumor remained. He did not return for further treatment until more than a year had elapsed, during which he seemed to be well. At this time, however, a renewal of the growth occurred, and it was about the size of a peachstone when he was readmitted to the Howard Hospital for further treatment. During this second treatment zinc-amalgam cataphoresis was mainly employed, the treatment lasting six weeks and being carried deeply into the base of the growth. A complete cure resulted, and at an examination of the parts six months later a healthy scar only was to be seen.

Case 3. Inoperable carcinoma of the groin greatly relieved by zinc amalgam cataphoresis; death from erosion of femoral artery and gangrene—Colonel H., aged 62 years, was sent to me by Dr. A. W. Knox, of Raleigh, N. C., in the summer of 1893. One year before he had noticed a lump in the left groin. On admission to the Sanatorium the tumor was the size of a large walnut, of a bluish color, and firmly attached by a broad base to the deeper parts of the thigh. It was situated just below Poupart's ligament and lay immediately over the femoral artery and vein, and was apparently attached to the latter, though the exact location of the artery was uncertain owing to the general induration.

At the patient's request it was decided to make a tentative use of electricity. The central and projecting portion was accordingly destroyed by local electrolysis, making a slight cavity, into which a solution of cocaine was poured. Into this the blunt amalgamated zinc was pressed and daily applications of the cataphoresis made, with currents averaging 150 milliamperes. The immediate effect of the application was to whiten the edge of the growth in contact with the electrode, the whitened coating peeling off later. The

indurated ring and base that now represented the growth was about three inches wide. Under constant applications the whole of this was gradually destroyed and replaced by healthy granulations, except the centre of the base, where the close proximity of the large artery rendered the applications unwise. At the end of three months the diseased area had been contracted to the size of a five-cent piece, but this was a deep cavity extending down to the great vessels, where it was thought to be unsafe to apply the current. The patient had increased 20 pounds in weight, and though brought to the Sanatorium on a stretcher, was now able to walk a half mile or more. During the continuance of this improved condition, however, the artery suddenly gave way one day at the bottom of the untreated spot. Drs. Thomas S. K. and T. G. Morton were called in and tied both artery and vein, which were found thoroughly infiltrated with cancerous material for some distance upward into the abdomen. Gangrene of the limb supervened, followed by death two weeks later.

An estimate of the value of the method in these three cases must be comparative, as cases similar to each are usually subjected to other methods, removal with the knife being the favorite. Hysterectomy in the first case would, of course, have involved removal of the ovaries also. Both this and removal of the uterus itself were avoided entirely, no natural structures being even injured, and the time required in the treatment was probably not longer than that necessary to recover from the effects of abdominal section. In the second case the bloodless removal of a sarcoma of the palate was followed by a treatment that I hope will render the patient less liable to a return of the disease. The third case was, of course, a failure to cure or to preserve life, yet it is thought that life was prolonged by the very evident curtailment of the growth and improvement of health. Comparisons were hardly possible, however, as an operation had been refused by one surgeon as useless.

BOOKS AND PAMPHLETS RECEIVED.

THE COMPLETE METHOD OF OPERATION IN CASES OF CANCER OF THE BREAST. By Dr. A. C. Bernays, St. Louis, Mo. Reprint from the *Courier of Medicine*, January, 1895.

A CASE OF FRACTURE OF THE THYROID CARTILAGE—RECOVERY WITHOUT TRACHEOTOMY. By Thomas B. Eastman, A. B., M. D., Indianapolis, Ind. Reprinted from the *Journal of the American Medical Association*, February 2, 1895.

TRANSACTIONS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION AT ITS EIGHTEENTH ANNUAL MEETING, HELD AT WASHINGTON, D. C., MAY, 1894.

OPHTHALMIA NEONATORUM. By C. A. Veasey, M. D. Reprint from the *Medical News*, February 23, 1895.

A CASE OF FRACTURE OF THE THYROID CARTILAGE—RECOVERY WITHOUT TRACHEOTOMY. By Thomas B. Eastman, A. B., M. D., Indianapolis, Ind. Reprinted from the *Journal of the American Medical Association*, February 2, 1895.

HORN EPI THELIUM OR SUMMER GRANULATIONS—ITS RELATION TO CONJUNCTIVITIS TRACHOMATOSA; IMPRACTICABILITY OF TREATMENT BY EXPRESSION. By Jos. E. Willets, M. D., of Pittsburg, Pa. Reprint from the *Medical News*, November 4, 1893.

THE HALO, OR RAINBOW SYMPTOM IN GLAUCOMA. By Joseph E. Willets, M. D., Pittsburg, Pa. Reprinted from *Annals of Ophthalmology and Otology*, Vol. IV, No. 1, January, 1895.

The Times and Register.

A Weekly Journal of Medicine and Surgery.

FRANK S. PARSONS, M. D.,
EDITOR AND MANAGER.

Subscription Price, . . . \$1.00 Per Year.

Send money by bank check, postal money or express order, payable to The Medical Publishing Co.

EDITORIAL STAFF.

W. H. PANCOAST, M. D., Philadelphia, Pa.
T. H. MANLEY, M. D., New York, N. Y.
E. W. BING, M. D., Chester, Pa.
S. H. MONELL, M. D., New York, N. Y.
J. R. CLAUSEN, A. M., M. D., Philadelphia, Pa.
AD. MEYER, M. D., Chicago, Ill.
LOUIS LEWIS, M. R. C. S., (Eng.) Phila., Pa.
J. A. TENNEY, M. D., Boston, Mass.
E. H. SANGREK, A. M., M. D., Philadelphia, Pa.
HENRY BURCHARD, M. D., D. S., Philadelphia, Pa.

PUBLISHED BY

THE MEDICAL PUBLISHING CO.

Communications are invited from all parts of the world. Original articles are only accepted when sent solely to this Journal. Abstracts, clinical lectures, or memoranda, prescriptions, news and items of interest to the medical profession are earnestly solicited.

Address all communications to

Room 718, Betz Building.

Entered at the Philadelphia Post Office as second-class mail matter.

PHILADELPHIA, MARCH 23, 1895.

SIGNIFICANCE OF SPRAINS.

Many times the practitioner is besought to prescribe for "sprains." Perhaps, some member of the family, or a friend, has met with an accident of an apparently trivial character, when the doctor is requested to send a recipe, or give directions, for treatment.

As a rule, the injury may be an unimportant one, and simple remedies may suffice; nevertheless, it would be well if practitioners would refuse to ever prescribe for any description of injury or malady unless he sees the patient. And in no class of cases should he deviate from this custom with greater reluctance than in cases of so-called sprains.

In young children, the bones of the shoulder and elbow are easily dislocated, and may be regarded as only sprains. In the adult, pints of liniments and various salves may be employed, in vain, on what are at first supposed as only sprains, but later turn out as Colle's fracture, fractures at the ankle or elbow joint. Not long since a case was observed

by the writer in which, for weeks, a woman bathed and bandaged what she supposed was a sprained elbow, but which was found to be a complete forward dislocation later; and was then reduced, only with much difficulty, after the arm had wasted and organic changes had set in over the luxated joint.

It should be always borne in mind that there are important nerve and vascular trunks, which pass over the movable segmentations of a limb, and that undue tension of them or laceration, in a wrench or twist of the limb, may lead to serious consequences if not early discovered. Dr. William B. Outten, of St. Louis, not long since published a highly valuable contribution on "Entasis," which should be read by all whose practice often brings to deal with joint traumas, and the classic brochure of Raymond, of Paris, on "Arrachement," is of the greatest value in this connection.

Let one always examine a joint, than rather make "a shot-gun" diagnosis, and later have to face a jury for his delinquency, as a doctor last year had to do in New York, who, through motives of delicacy, made a chance diagnosis, through a lady's petticoats, and prescribed a lotion for what subsequently turned out to be a fractured patella.

IS A TENDENCY TO DIPHTHERIA AN INHERITED CONDITION?

Doubtless most physicians have observed, in epidemics of diphtheria, a tendency among certain families to contract the disease, while other families, seemingly to be equally exposed to the infectious element, exhibit remarkable immunity.

Now that the advent of horse-serum, in the treatment of diphtheria, has rendered conscientious reports concerning the diagnosis more important, is it not well to inquire into the natural immunity the human system may exhibit when in contact with the infecting element of diphtheria?

We note the horse is not prone to suffer from diphtheria. Why? It is

assumed that an agent exists in the blood of the hourse which renders the diphtheria poison inert. Is this any the less true of blood in certain of the human species? In other words, we often see croup, spasmodic, membranous and diphtheritic, running in certain families from generation to generation.

Referring to the March 9 number of "The Times and Register," page 191, it will be noted that Revilliod, a French observer, has intimated that there exists a family predisposition to diphtheria, and that often it is found that this condition is dependent upon a family history of tuberculosis.

So far as our own observation goes we cannot regard the connection between the two diseases in any other light than that of mere coincidence, but, that diphtheria may have a family predisposition of its own we have ample clinical evidence.

We would be glad to receive from our subscribers any personal observations they may chance to make along this line, and trust thereby considerable new light may be thrown on the etiology of diphtheria. If observers will kindly write us in such a manner that we can publish the same we shall be glad to do so.

PROSTATIC HYPERTROPHY TREATED BY CASTRATION.

Lutken (Deut. med. Woch., January 31, 1895) relates the following successful case: A man, aged 65, had difficulty in micturition for several years past. The catheter had now to be used some seven or eight times a day, and recently this had been accompanied by much pain and occasionally by the passing of some clotted blood. The author felt per rectum in the region of the prostate a swelling of the size of a hen's egg. As no improvement occurred, castration was suggested and agreed to. Ten days after the operation the left half of the prostate was smaller. A month later this left half could hardly be felt, and the right half was about the size of a walnut. Four months later no distinct enlargement of the prostate could be ascertained.

Immediately after the operation the catheter could be used less frequently, and in 10 days' time discarded altogether. Five months after the operation the patient was perfectly well, and could pass a good-sized stream of water. The author thinks that this operation is preferable to others in use, and even to regular catheterism. No living spermatozoa could be found in the testes, so that this case speaks against the view that the organs must be functionally active to get shrinking after castration.

AN EFFECTIVE REMEDY FOR GOUT.

Piperazine has now been sufficiently tried to warrant the opinion that it should occupy a prominent place in the therapeutics of the uric acid diathesis, especially in gout and renal lithiasis. In cases of acute gout it relieves the pains and other discomfort, and by keeping the uric acid in the blood in a soluble state and favoring its elimination from the system it prevents recurrence of the attacks. In the chronic form of the disease it has been found an excellent absorbent, causing absorption of the uratic deposits in the joints and other tissues of the body, and frequently effecting a cure. A number of cases of renal lithiasis are on record in which before resorting to surgical interference Piperazine was given a trial, with the result that the calculus was dissolved and the operation could be dispensed with. As a solvent for uric acid calculi Piperazine has the advantage of not only dissolving the outer layers, but also the albuminous nucleus, thus causing their complete disintegration. It is, however, of no service in renal colic due to concretions of oxalates. Finally in that ill-defined class of cases known as lithemia the systematic administration of this remedy affords great relief by determining a more rapid elimination of uric acid from the system, as shown by a diminution of urinary gravel. Piperazine-Bayer prepared by the Farbenfabriken of Elberfeld can be obtained in one-half and one-ounce vials or in

tablets of 16 grains each, which afford a convenient method of administration, as each tablet is equal to about the average daily dose of the remedy.

GLYCERO-PHOSPHATES.

The dose for Glycero-Phosphate of Lime for adults is 15 to 45 grains per day. Glycero-Phosphate of Lime and Glycero-Phosphate of Iron in combination have given excellent results in the treatment of scrofula in children. Both salts can be dissolved in lukewarm milk. Hot milk or other hot liquids should not be used. The preparations can also be given in powder form.

The solutions of the Glycero-Phosphate of Lime in the proportion of 1 to 30 are sometimes incomplete. The addition of citric acid, one-tenth the quantity of salt, facilitates the solution and promptly renders the mixtures limpid.

The Calcium Salt is especially indicated for administration by mouth, while the Sodium and Potassium Salts, which are of a syrupy consistency, are more readily soluble and therefore better for hypodermic injections.

The watery solutions of the Glycero-Phosphates are not stable, but decompose in a short time.

SURGERY OF THE STOMACH.

Rosenheim, since his latest communication, had an opportunity to operate six times, for cancer and stenosis of the stomach.

One patient was a woman, 49 years old, coming to the clinic with symptoms of gastric cachexia. An examination of the stomach's contents demonstrated the absence of H. Cl and the presence of a large quantity of lactic acid.

Accordingly, a diagnosis of cancer was made, though on palpation the indications were negative. On laparotomy and exploration nothing was found but a small ulcer at the lesser curvature, with adhesions of the stomach to the liver. Boas' sign, then, for gastric cancer is not definite nor reliable.

Surgery.

IN CHARGE OF
DR. T. H. MANLEY, New York.

OSTEOMA OF THE ADDUCTORS.

M. Sourris presented a young soldier, of 21 years, formerly a farmer. He was ordered to join the huzzars, in entering the army, though he never before mounted a horse. One month after his entrance he observed, one evening, after a long day in the saddle, that his left thigh was painful and stiff. But he continued on duty some time longer, when he consulted the troop surgeon. On examination, the integuments on the inner side of the thigh were ecchymosed, the muscles hard and painful, under which was a well-defined triangular mass, the summit of which was adherent to the ramus of the pubis. Under massage treatment the tumefaction in the surface parts had diminished; but a tumor of an osseous consistence remained. The neoplasm measured 0.06 to 0.07 centimetres, and presented all the characters of a cavalier's osteoma.

M. Coyne recalled the cases formerly reported by MM. Ferron and Sourris, in which, after extirpation, a cure was speedily wrought. On histological examination of the pathological pieces nothing other than connective-tissue elements were found.—Soc. d'Anatomie et de Physiologie de Bordeaux, 21 Jan., '95.

DOUBLE ATROPHY OF THE TESTICLES.

M. Guerin presented a young tuberculous man of 20 years. His visage had an infantile expression, his cheeks were rosy. There was no beard. This was in contrast with his height and other bodily development.

On examination, two testes, no larger than beans, were found. The penis was very small. The pubis was covered with hair. The larynx was ample and voice normal. He said that his testicles were never larger, and that his parents had noticed it. He never had firm erections, nor emissions. His voice became mascu-

line at 17 years, at which time the pubic hair commenced to grow. Parotids were developed for his age. There was no history of syphilis.

M. Aronson remarked that this was an ideal case for the employment of injections, with testicular suck. (ibid).

TORSION OF THE SIGMOID FLEXURE OF THE COLON; ENORMOUS DILATATION, OBSTRUCTION, LAPA- ROTOMY—DEATH.

A pathological specimen was presented by M. Adenot, removed from a man 35 years old. The cause of obstruction was torsion of the sigmoid flexure of the colon, the bowel having positively attained elephantine proportions.

The patient suffered for years from digestive troubles, characterized by dyspepsia and constipation. After ailing a brief time, he noticed a fullness in his left groin. Finally obstruction developed, with symptoms of acute occlusion. His general condition was so serious, when operation was begun, that it was feared he would sink under the anesthetic.

The operation was extremely difficult. On opening the abdomen a huge mass rolled into the wound, which, at first, could not be recognized. This proved to be the sigmoid flexure, which was larger than the entire colon. At the point where the rectum passed out through the peritoneum there was torsion of the bowel. This was easily unfolded, when, by moderate pressure, its contents were pressed out through the anus, and from 15 to 20 litres—five gallons—solid and liquid feces discharged. The circumference of the distended bowel was about 45 centimetres—18 inches. The patient succumbed the night following operation. In this case, post-mortem examination showed that the accident followed in consequence of an exaggeration of the meso-colon, which permitted the bowel to turn over on its own axis, and thus close its own lumen. Trasetour, Glenard and Koenig have reported similar cases. —Le Mercredi Med., 94, No. 8.

SYPHILITIC INDURATION OF THE CORPUS CAVERNOSUM.

This subject is not a new one, for the lesion has been recognized for a long time; but there has been some dispute as to its syphilitic origin in all cases. Professor Audry, of the Hotel Dieu, at Toulouse, has lately again directed attention to it. Tuffier, in *Annales des Organes Genito-Urin.*, in 1885, and Mauriac, in *Gaz. Heb. de Med. et de Chirurg.*, have each given it extended notice.

The able theses of Legalchier Baron, Paris, 1886; Ricord, in *Gaz. des Hop.*, 1847; Nelaton, *Traite de Path. Ex.*; Dumarquay, *Des Affections Chirurg. de Penis*, 1859, and at a more recent period, Fournier, Verneuil and Duploy have related cases. In all, 39 observations have been made.

Some authors found it associated with a diabetic state, where evidence of syphilis was not proven.

In 1879 Delafosse described a case of this penile strabismus, which seemed to have been produced by rheumatism. The penis was much enlarged and hooked over, towards the abdomen. He never had syphilis, nor had been injured. Both parents had died of chronic arthritis. He, however, could copulate, though the organ so crowded forward in walking that he was obliged to wear an apparatus to confine it in place. Etienne (*Annales de la Polyclinique*, Avril, '93) has recorded three cases of this induration, in the non-syphilitic rheumatism, varying in age from 33 to 64 years.

Delabore had witnessed three cases, which progressed on to ossification of the penis. According to this author penile distortion might follow traumatism, rheumatism or syphilis. It is inflammatory when occurring in the course of gonorrhea. In syphilis, the ground-work is gummatous infiltration of the corpus cavernosum in peri-urethral tissues. As it passes out of this stage dense, fibrous induration succeeds. Spaach saw an instance of this lesion in a celibate. He had a tumor encircling the penis, about an inch from the pubis. It was about the size of a haricot, and on erection of the organ

produced a short lateral curve. Van Buren had seen five similar cases, which he designated circumscribed, chronic inflammation of the penis. Two of his patients had suffered from syphilis.

Most modern authors are agreed that gout and rheumatism are predisposing factors in the etiology, though in nearly all cases we will find either inherited or acquired syphilis the underlying cause. This is rather demonstrated by therapeutic proof than otherwise, for we will discover, in the general run of cases, by local mercuric friction with the iodides internally a relief or cure will supervene.—*Le Mercredi-Med.*, 20 Feb., 1895.

METHYL-BLUE AND. EPITHELIOMA.

Dr. Darier, in a communication to the Academy of Medicine of Paris, reports the success of Dr. Mosetig, of Vienna, with the methyl-blue treatment of cancers, though M. Dentu has not with methyl-blue obtained cures. The author relates a series of cancerous tumors of the face cured rapidly by the daily application of a 20 per cent. solution of the drug. He considers the drug to have a specific action on cancer. A daily touching of the sore with the solution will effect a cure, but the good result will be more quickly produced by cauterizing the carcinoma with chromic acid or the galvano-cautery. For deep-seated carcinoma he recommends the solution to be hypodermically injected. Tumors whose surface is broken should be covered by a healthy skin-flap on or about the 15th or 20th day after treatment commenced. Dr. Darier presented to the academy a patient who had had epithelioma of the left eye, and was then quite free of the disease, its site being marked by a cicatrix. This was the ninth case the doctor had thus treated, and with success in all.—*Les Nouveaux Remedés*.

OUTERBRIDGE'S OPERATION FOR HEMORRHOIDS.

For practical purposes in doing this operation we may divide the op-

eration into two varieties: (1) Cases with only external tabs or with the more frequent arrangement of three tumor-like masses just inside the sphincter ani, usually considered most favorable for clamp and cautery or ligature. These may be dealt with in the following way: Grasp with a pair of thumb forceps, or insert the point of a tenaculum into the most prominent portion of the "tab" or tumor. Make enough traction at right angles to the gut to clearly define the mass. Cut off the mass with curved scissors pressed well toward the muscle. The edges of the raw surface are united with continuous catgut sutures. (2) Where the whole "hemorrhoidal inch" is dilated thoroughly dilate the sphincter, then cut away a strip of mucous membrane and hemorrhoidal tissue down to the muscle, following the muco-cutaneous line all around the lumen. If external hemorrhoids are also present, in order to prevent recurrence, a strip of skin down to the sphincter ani is removed in the same way. The free edges of the skin and mucous membrane are now brought together with a continuous catgut suture. Hemorrhage is slight and easily controlled.—*Mathews' Medical Quarterly*.

A MALPRACTICE SUIT.

An interesting malpractice suit, lately held in Ireland and published in the *Medical Times and Hospital Gazette* (November 17, 1894):

Dr. Thomas O'Brien was the defendant in the City of Cork assizes. The plaintiff was a young, able-bodied groom who had been thrown from a horse and sustained a fracture of the clavicle. Soon after dressings had been applied gangrene of the arm set in, and a shoulder-joint amputation had to be performed. Drs. Walsh and Hueston, of that city, on the stand stated that in their opinion the gangrene supervened in consequence of too tight bandaging; while Surgeon Wheeler, of Dublin, after hearing the testimony, testified that he believed that the gangrene was due to an injury of the subclavian vein at the time of the accident. Mr. Nyles, of the Richmond Hos-

pital, employed by the plaintiff, said that in the whole history of surgery rupture of the subclavian vein as a result of fracture had never occurred.

The plaintiff sued for £1000, and it appears that the jury was satisfied that the doctor was blamable, for they brought in a verdict against him for £175 damages.—Philadelphia Medical and Surgical Reporter.

Medicine.

IN CHARGE OF
DR. E. W. BING, Chester, Pa.

HOW TO DISGUISE THE TASTE OF COD LIVER OIL.

To disguise the taste of cod liver oil is an advantage which may be obtained by the following plan:

Four hundred grammes of oil are mixed with 20 of freshly roasted and ground coffee and 10 of animal charcoal. The whole is kept in a water bath at 140 degrees F. for 15 minutes in a stoppered flask. It is shaken occasionally for two or three days and then filtered through paper. The oil is limpid and light colored, and tastes and smells strongly of coffee.

BICARBONATE OF SODA IN THE TREATMENT OF GASTRIC DYSPEPSIA.

Administration before meals doses of 50 cgms. to 1 grmme. are without apparent action; with 3 grms., given one hour before meals an excitation of the movements and of the gastric secretion occur.

In hyperacidity less is required; in hyperacidity large doses are necessary.

Administration after meals. The alkaline salt saturates the acid of the gastric juice and arrests digestion. This action is, however, transitory, and excitation succeeds depression. The rapidity with which this condition comes on depends on the size of the dose. With very large doses it is wanting, because the H. Cl although furnished in excess in the beginning cannot be supplied at the end of digestion. Such are the immediate results. According to some authors there is always

sooner or later a phase of depression.

The conclusions for treatment to be drawn from these facts are as follows:

In hyperacidity the bicarbonate should be given in small doses a half hour before meals to excite the stomach. It is evident that this treatment is only applicable to cases of functional hyperacidity susceptible of reaction and not where there is atrophy of the mucous membrane. The author advises the giving of small doses every two days.

In hyperacidity the soda should be given after the meal during the whole process of digestion in large quantities, in broken doses of two grammes each. Here the action desired is the depressant action of the bicarbonate.—Rev. de Therap.

HEMORRHAGE INTO THE ANTRUM OVALE.

Hemorrhages of the antrum ovale resemble in most of their symptoms those seen in cervical hemorrhage; a sign more particular to the former is the production in the paralyzed limbs of phenomena of Jacksonian epilepsy. These do not belong exclusively to this location, for brain tumor, cerebral syphilis, hemorrhagic-pachymeningitis may also produce them. Cervical hemorrhages themselves sometimes determine in the paralyzed side muscle twitching, but on the one hand it is easy in ordinary cases to differentiate hemorrhage of the antrum ovale from preceding affections which frequently determine epilepsy, and on the other hand this phenomenon is really rare in cervical hemorrhage. It is, therefore, a symptom of great weight in the diagnosis of hemorrhage into the antrum ovale.

E. W. B.

OCYTOCIC ACTION OF SALICYLATE OF SODA AND SALICYLIC ACID.—VINEBERG.

The salicylates are so frequently prescribed that it is useful to be thoroughly acquainted with their therapeutic action. They possess a property which is not commonly known—namely, their action on the female generative organs. This action is very energetic.

Schuchart has remarked that under the influence of the salicylates the menses become more abundant and last longer; he has also observed four cases of abortion which he attributed to the drug employed for another purpose. Blinz produced abortion in eight guinea pigs experimented on with soda salicylate. The author reports two cases in support of this theory.

1. A woman was attacked on the fourth day after a normal labor with acute articular rheumatism. The lochia were normal before the attack. Salicylate soda was administered every two hours for some days. On the second day a very abundant hemorrhage occurred, although examination proved that involution was going on properly.

During the three weeks in which she took the drug more or less severe hemorrhages occurred almost every day. As soon as the drug was stopped the bleeding stopped; involution went on without any difficulty.

2. A girl, anemic and irregular, had salicylate of soda given for an attack of acute tonsillitis. In 12 days the menses appeared, a week before their time.

Conclusions—Salicylates may be advantageously given in tardy and insufficient menstruation. They should not be given to pregnant women predisposed to abortion, nor to those suffering from menorrhagia. If given during pregnancy its action should be carefully watched.—Gaze. de Gynecol.

THE FLACCID BELLY OF INFANCY.

Marfan (Rev. des Mal. de l'Enf., February, 1895) observes that infants present distension of the abdomen under two forms—the one flatulent and tense, the other flaccid. In an infant who suffers from several attacks of dyspepsia with flatulent distension ending in diarrhea, the abdominal parietes are apt to be permanently weakened, and then the condition of flaccid abdomen is produced. The condition is not a consequence, may even be an antecedent, of rickets, but is of the type and form so often seen in rickets and of-

ten called the "frog's belly." The abdomen is soft, tympanitic on percussion, but not to an extreme degree; palpation may provoke gurgling. The linea alba is often widened, an umbilical hernia is frequent; inguinal hernia and prolapse of the rectum are also common. The infant is normally big-bellied, but the bigness is mainly in front; in the child with flaccid enlargement of the belly the enlargement is in great part lateral, as may be well seen by looking at the trunk from behind; it also encroaches upwards, and may even protrude very notably immediately below the thorax, so as to make an angle with the ribs. The enlargement is clearly not due to flatulent distension, and Marfan has made a series of post-mortem examinations and measurements of the intestine. As a rule, the colon is found to be distended, lying over and partially concealing the stomach, which is also distended. The liver may or may not be enlarged, the spleen seldom. The distension of the colon and stomach may also be absent in typical cases. The enlargement of the abdomen is, in Marfan's opinion, really due to hypertrophic elongation of the intestine. In the new-born infant the small intestine is about five times the total length of the body; the large about equal to the length of the body; so that the total length of the intestine is about six times that of the body. The length of the intestine increases rapidly during the first two months of life, so that it becomes about seven or eight times the length of the body (small intestine six times, large, rather longer than the body). Measurement of the intestine in infants who have died after presenting the condition of flaccid belly showed that the intestine was longer than natural. In every one of 16 cases examined by Marfan the total length of the intestine was from nine to 12 times that of the body. Considerable elongation was observed also in certain of the cases of tympanitic distension. The elongation of the intestine is associated with a form of gastro-enteritis which requires further study.

Gynecology and Obstetrics.

THE ORIGIN OF PAPILLOMA-TOUS CYSTS.

Kossmann (Manatschrift f. Geburtsch. u. Gynak., February, 1895) believes that there is no truth in the current theory that papillomatous cysts of the ovary and broad ligament are developed from the parovarium. He goes further than Whitridge Williams, who has stated his opinion that these cysts are sometimes developed from elements belonging to the Fallopian tube itself. Williams has detected tube-like involutions in ovarian tissue which he actually traced to tubal fimbriae.

BATHS IN THE TREATMENT OF STERILITY.

Kisch (Therap. Monats., January, 1895) ascribes sterility in the female either to the result of some form of pelvic peritonitis, to constitutional affections, to chronic local inflammations or catarrhs or dyspareunia. He then describes the measures and treatments likely to alleviate the condition. Ordinary baths, partial or complete, douches, compresses, etc., are able to act on inflammatory deposits together with mineral waters, which increase the secretion of the intestinal tract. The baths of Elster, Franzensbad and Marienbad endowed with ferruginous properties, or the saline baths of Kreuznach, etc., are specially indicated. Sterility dependent on anemia should be treated at places like Pyrmont, Schwalbach, Spa, etc. For catarrhal conditions, alkaline springs, such as those of Ems, Vichy, etc., should be resorted to; or, should the secretion be excessive, more benefit might be derived from the astringent waters containing sulphate of iron, namely, Alexisbad, Levico, etc. Excessive corpulence as a cause of sterility should be treated at Marienbad, Tarasp, Friedrichshall or Pullna. The results of vaginismus may be alleviated by the warm springs of Schlangenbad, Wildbad, etc. Finally dyspareunia, an important cause in

the author's estimation, may be improved by baths or douches of water containing carbonic acid, as also by residence at an altitude, or by the sea.

ABORTION INDUCED INSTRUMENTALLY BY THE WOMAN HERSELF.

Goenner reports a case of a woman, 37 years old, who had given birth to four children at term, and induced an abortion, without assistance, three times. Believing herself to be pregnant, she inserted an elastic catheter into the vagina. The operation caused considerable pain, and on withdrawing the catheter some hemorrhage occurred. It was discovered that a part of the instrument remained behind. An attack of peritonitis followed, and abortion occurred five days after the use of the catheter. Six days later, during defecation, the patient was seized with severe pain in the lower part of the abdomen and in the ileo-cecal region. No trace of the retained piece of catheter could be found by palpation and operative procedures were considered, when the missing fragment was passed in a fecal discharge. The vagina did not present any punctured wound. The patient eventually recovered.—Boston Medical and Surgical Journal.

A CONTRIBUTION TO THE DIAGNOSIS AND THERAPY OF CARCINOMA OF THE FUNDUS UTERI.

Calderini (Berliner klinische Wochenschrift, No. 15, 1894), in a series of 150 cases of carcinoma of the uterus, was able to diagnose eight (where the cervix was perfectly normal) as new growths of the fundus uteri. Upon six of the cases hysterectomy was performed, one was operated upon elsewhere, and the other refused operation. One case died as a result of the operation, and another from a return of the disease with metastasis. The remaining four are still living and healthy. The woman who refused operation died with metastasis to the peritoneum. The histories of three

other cases are: The first was diagnosed through microscopical examination as non-malignant adenomatous disease of the mucosa, and the second and third as rapidly-developing sarcoma. All three cases gave metastasis to other organs. The last cases show the result of delayed diagnosis. These cases prove how very important the microscopical examination of curetted tissue from the uterus is, and that one should not be satisfied with the diagnosis of fungoid hemorrhagic endometritis. If the diagnosis of a malignant new growth is definitely made, provided the uterus is still movable, a complete hysterectomy is indicated. In doubtful cases Caledrini advises that, after a short time, the uterus be curetted again and the removed tissue carefully examined microscopically. In cases of simple adenoma, where the epithelial cells are atypical, or there is in places a double row of epithelial cells and they show active karyokinesis, the radial operation is indicated.

Therapeutics.

IN CHARGE OF
DR. LOUIS LEWIS, Philadelphia.

A CHEMICAL ANTIDOTE FOR CHORAL POISONING.

The Glasgow Medical Journal for February publishes an article on this subject by Dr. John Dougall, of Glasgow. When the choral was first used, says the author, its hypnotic action was thought to be solely due to the generation of chloroform from it by the alkalis of the blood; its effects on the body generally were, and indeed still are, held as almost identical with those produced by chloroform. This view, however, he says, has been disputed on the grounds that the quantity of chloroform which a full dose of chloral is capable of producing is quite inadequate to cause the hypnosis and anesthesia that have been observed, also that the greater part of the chloral is exhaled from the lungs unchanged, and that small quantities of it may

be found in the urine, but no chloroform. Whatever facts or theories, however, says Dr. Dougall, there may be regarding the manner of the hypnotic and anesthetic action of chloral, there can be no doubt about its chemical composition and affinities, and, in particular, that it is almost at once decomposed, at and above 60 degrees Fahrenheit, outside of the body in an alcoholic solution of potash into formate of potassium and chloroform, and, as the author has proved by trial, somewhat less quickly in an aqueous solution of potash.

Assuming, he said, that a person has taken a poisonous dose of chloral, say 80 grains, and that there could with safety be given the chemical antidote, 27 grains of potash, this amount being the quantity by weight in the formula required to decompose 80 grains of chloral—in such a case, says the author, there are strong a priori grounds for assuming that in about 15 minutes the chloral in the system would be entirely changed into formate of potassium and chloroform, or, at least, that so much of it would be decomposed that the residue would be harmless. But would not the potash, he asks, or the amount of its formate, or of the chloroform thus produced, be as lethal as the chloral? Undoubtedly 27 grains of potash swallowed at once, even much diluted, would cause serious symptoms. But even if half that quantity was given in divided doses—say seven grains every hour—in warm milk, gruel or barley-water, it seems very probable that by this means no serious irritation of the gastro-intestinal tract would be the result, and that in a short time so much of the chloral would be decomposed as to render the rest at least non-lethal.

The liquor potassae of the British Pharmacopeia, says Dr. Dougall, contains about a grain of potash in 16 minims, and the maximum dose stated is 60 minims. Hence, he says, to give seven grains of potash is equal to giving 112 minims of liquor potasse. He thinks it may be assumed that this quantity, highly diluted, might be given without fear of causing unfavorable symptoms. By this

means 20 grains of the chloral would soon be decomposed, thereby neutralizing its lethal power to a certain degree, if the potash is given before the patient is too far gone to be afforded relief by this means; then, if in an hour after a similar dose of potash is given in the same way, this would reduce the chloral in the system to 40 grains, a quantity quite within the bounds of safety for an adult, provided there is no heart trouble.

Dr. Dougall says that he has proved by experiment what has been stated by others—namely, that the carbonates and bicarbonates of potassium and of sodium also decompose chloral; but their action, particularly that of the bicarbonates, is very slow, and, besides, a much larger quantity than of potash is required, also a heat much above that of the body. With regard to the action of formate of potassium, it merely causes a peculiar eruption of the skin, which soon disappears when the use of the drug is stopped. This eruption is well known to habitual chloral-takers, and seems to prove that chloral is decomposed in the blood as stated.

With regard to the probable effects of the chloroform which would be generated by the decomposition of 40 grains of chloral, the author finds that this quantity of chloral requires 13.5 grains of potash for its decomposition, which results in the production of 28.5 grains of chloroform, equal to 21.5 minims. As much larger amounts of chloroform (from half an ounce to four ounces) have been swallowed and recovery has followed, and as it is likely that the greater part of that which is generated in the blood by the decomposition of the chloral is exhaled as fast as it is produced, Dr. Dougall thinks that nothing serious need be feared on this point.

INDIAN HEMP.

R. Cowan Lees, in the *British Medical Journal*, says: "It has always been difficult to understand why the resin of this plant should alone be recognized in the *British Pharmacopæia*, more especially when we find

it stated in works on the physiological action of this drug that in India several preparations are used by the natives to produce its stimulating and exhilarating effects, amongst which watery infusions are specially mentioned.

"During a short visit to India some years ago my attention was drawn to the fact that several modes of using the herb were employed by the natives—modes not capable of extracting much, if even any, of the resin. So far as I could observe, watery infusions were commonly used, but whether in combination with other substances or not I am not in a position to state. This fact, however, led me to try what benefits might be derived from the use of a preparation of the plant, not depending on the resin alone.

"Messrs. T. and H. Smith, who first obtained the resin in a state of comparative purity, state that 'it is a brown amorphous solid, burning with a bright white flame, and leaving no ash; powerful in its action when taken internally, and that two-thirds of a grain act as an active narcotic, whilst one grain produces complete intoxication;' but the question might be advisedly asked, Is it completely freed from its essential oil? As a matter of fact, it is found that when the extract is kept for some time it becomes hard and brittle, and less potent in its action, a circumstance which goes a long way to prove that such a condition is the result of loss of volatile oil from the resin, and pharmacists are advised to 'lay aside and not employ for medicinal use that which has become old.'

"We are told by Bently and Trimen that 'both Hindus and Mohammedans use this herb, either by smoking—with or without tobacco in combination with other substances—or by simple infusion in water.' Gunjah—guaza of our London market—has but a faint taste, with a peculiar but not unpleasant narcotic odor. These properties depend in a great measure on the volatile oil and resin. The latter some consider the more important constituent of the plant.

"In the watery infusion employed by the Hindus and Mohammedans as mentioned above, we can conceive

of little, if any, of the resin being dissolved and held in solution, whilst, on the other hand, much of the volatile oil might be dissolved by the water, together with other constituents of the plant. Dr. Personne regards the volatile oil as the sole active principle, and in proof of this he states that 'when the volatile oil is inhaled, a distinct sensation of shuddering with motor excitement, followed by prostration and syncope, is experienced.' Again, Dr. Preobraschensky has found a volatile alkaloid—most plentiful in the flowering tops—and which he considers somewhat similar in its action to nicotine or nicotine.

"Feeling somewhat satisfied that water was capable of dissolving at least a portion of this volatile oil, and knowing that watery infusions of the drug were used for intoxicating and stimulating purposes in India, I had prepared for me a strong aqueous extract of the flowering tops of the female plant of the usual strength of liquid extracts, and from its use I have obtained good and satisfactory results. It possesses the anodyne and soporific action generally ascribed to the resinous extract, although in a modified degree. It has the characteristic odor of the hemp, has a beautiful deep amber color, is miscible with water, and hence there is no difficulty in combining it with other liquids, and it presents no unseemly immiscible mixture repellent to a patient.

"Liquor cannabis indicæ in my experience gives all the beneficial effects without the drawbacks of the tincture, avoiding those extreme exhilarating conditions bordering on intoxication which are sometimes met with even when using a medium dose of the latter. It does not seem to interfere with the secretion of mucus from the bronchial glands—a circumstance which renders it superior to opium in those cases suitable for its use, whilst in pulmonary affections generally it acts most favorably as a soporific and anodyne.

"My greatest experience has been in the treatment of phthisis pulmonalis, and here I cannot speak of it too highly, for whilst it most perceptibly relieves the cough it aids the patient

by its stimulating and exhilarating qualities, supplying a remedial agent in a manner which in my opinion no other drug can so beneficially do. In indigestion with constipation, and also in many of the affections of children, especially where nervous symptoms are present, it has also done good service. I do not presume for one moment that it will displace opium is at present used it may be pain is a prominent symptom, but I feel sure that in many cases where opium it at present used it may be substituted with great advantage.

"The dose which I commonly use is half a fluid drachm for an adult, but it may be increased to a drachm in many cases, whilst for children corresponding doses to age may be adopted, though I have noticed that children are somewhat less susceptible to it than adults."

Ophthalmology.

IN CHARGE OF

DR. J. A. TENNEY, Boston, Mass.

A NEW OPERATION FOR GLAUCOMA.

George L. Walker, F. R. C. S., of Liverpool, presented a paper to the International Congress of Ophthalmology, held in Edinburgh last summer, in which he described a new operation for chronic glaucoma.

He states the well-known fact that iridectomies are of doubtful utility in this disease, and he has long since abandoned them. He believes that the earlier successes that followed iridectomy were due to the cystoid cicatrices that often followed the operation, which were lamented by the surgeon. Mr. Walker's operation makes a fistula in the cornea, and is thus described in his own words:

"After cocainizing the globe, I snip with scissors, just behind the uppermost part of the cornea, a flap of conjunctiva about 1-16 in. wide by 3-16 in. long, turn this back, and then fixing the globe with forceps, I thrust through the sclero-corneal margin, close to the base of the flap, a nar-

row hinge, making an incision perpendicular to the plane of the iris, large enough to take in the flap. Then I withdraw the knife, letting out the aqueous; when it has ceased to flow I push the flap into the anterior chamber through the incision, and leave it there. An old worn-out canaliculus knife does this very well, and also serves for the subsequent probing which the fistula requires.

"The eye is bound up for 24 hours and then inspected. If the flap be found to have remained in the incision, the lids should be again closed for a short time, until it be thought advisable to expose the eye. Sometimes, owing to the incision having been made too large for the flap, the latter may be washed out, in which case it will have to be replaced, perhaps several times, before it will be permanently retained."

The raw surface of the flap unites to the adjacent edge of the corneal incision, and as the epithelial surface of the conjunctiva will not unite with the edge of the cornea, a fistula is made into the anterior chamber. This fistula needs probing.

He says he has kept eyes alive for the last four years that would otherwise have been lost. He claims that if it does not cure these cases it will at least retard the progress of the disease indefinitely.

CONVERGENT STRABISMUS.

Dr. Howard F. Hansell recently read a paper before the Section of Ophthalmology of the College of Physicians, in Philadelphia, in which he indorsed the view of Donders, that hypermetropia is the most prominent cause of convergent strabismus. He admits that other conditions are factors in the causation of squint, such as amblyopia, misplaced muscles, abnormal refraction, unbalanced strength of muscles, faulty innervation, etc.

He states that congenital amblyopia is associated with convergent strabismus in about 75 per cent. of all cases, *Violet* (*Archiv. d'Oph.*, vol. xx, p. 289), in an analysis of 150 cases of convergent squint, found 122 had amblyopia.

He holds that operations are only cosmetic. Parallel visual axes seldom exist after operations, and there is no incentive to binocular vision. The patient is accustomed to using the better eye, so that he suppresses the poorer vision of the other. He antagonizes the idea that amblyopia is caused by squint.

He makes the oft-repeated statement that 75 to 90 per cent. of squint cases have hypermetropia. Snell claims 95 per cent. Dr. Harlan quotes *Valude* (*Archiv. d'Oph.*, vol. x, No. 4), as teaching the true relation of hypermetropia to squint, saying that "Convergent squint does not depend upon ametropia alone, but that a neuropathic disposition is an important, sometimes the principal factor."

Dr. Hansell holds that the supranormal contraction of the ciliary muscle in hypermetropia communicates a stimulus to the nuclei in the floor of the fourth ventricle, and an order for corresponding contraction is sent out to all muscles supplied by the third nerve.

It is easy to repeat the teachings of a master like Donders without question, and to consider hypermetropia and internal squint as cause and effect when they are mere coincidences. Newton felt it necessary to make the colors of the solar spectrum correspond to the vocal scale, so he stretched six colors into seven. No one knows how long this notion of the spectrum will be taught. The corpuscular theory of light was held long after it would otherwise have been discarded, because it was upheld by the same authority.

Cold is an exciting cause of rheumatism, but not a primary cause. It will not excite the disease in all people. If the eyes tend toward convergence, hypermetropia, amblyopia, or anything that interferes with vision will increase the tendency. If they tend toward divergence, myopia will make them diverge more than they would otherwise.

It is in order to explain why the vast majority of hypermetropes do not squint; and why a very inconvenient number have exophoria to an extent that tries if it does not baffle the skill of the ophthalmic surgeon.

Miscellany.

BENEFIT SOCIETIES, CORK.

A special meeting of the members of the St. Luke's Mutual Benefit Society was held last week for the purpose of electing a medical officer in the room of Mr. Philip Lee, L. R. C. P. & S. Irel., who had resigned. There were four applicants for the appointment, three hailing from England, but only two put in an appearance. Mr. William McMath, M. B. Royal University, was appointed, this being the fourth society to which he has been elected. A resolution thanking Mr. Lee for his past services was adopted amid applause.—*Lancet*.

ONYCHOPHAGIA A SIGN OF DEGENERATION.

Dr. Berillon writes as follows: "As the result of an inquiry carried out in several schools, for both sexes, I am confirmed in the opinion which I have already expressed, namely that onychophagia, and habits of a similar order, are generally connected with degeneration. The frequency of onychophagia is very variable in different centres. In some schools not more than two or three children out of ten are addicted to nail-biting, but in others, and especially in the City of Paris, the proportion of onychophagians is often very considerable, amounting in the aggregate to upwards of a third of the total number of pupils that came under observation. A careful examination almost always brings to light the stigmata of degeneration. The children who indulge in the practice are commonly more puny than the others; and they frequently present cranial deformities, irregular teeth, abnormally placed and shaped ears, etc.

"It has been noted by many teachers that the subjects of onychophagia exhibit a well-marked antipathy towards physical exercises, and more especially towards games involving sustained efforts. They write badly, and in general are remarkably deficient as regards manual dexterity. Perseverance is never observable amongst them, and for the most part

they are unmanageable. In a word, when compared with other children of the same age they invariably manifest inferiority in some shape or form.

"All teachers agree that the pedagogical methods usually employed are quite unable to effect a cure. In the majority of cases this can only be obtained by the use of hypnotic suggestions. Ordinary suggestion, in the waking state, is only occasionally successful.

"The habit of nail-biting sometimes persists to an advanced age. In our own practice we have successfully treated an old man of 72, and a lady of 56, who from earliest infancy had been incessantly the victims of onychophagia."

(Doubtless M. Berillon is right in the main, but the gatherer is acquainted with a most brilliant and successful man who is, and has always been, an inveterate nail-biter.)
—*Provincial Medical Journal*.

CHOLERA IN CONSTANTINOPLE.

The cholera reports from Europe are beginning early this year. On February 8 a cablegram reported eleven cases of the disease in Constantinople, seven of which were among the Turkish troops. During the week following, there were sixty-one cases and twenty-nine deaths.

BLEACHING OF THE TONGUE UNDER PEROXIDE OF HYDROGEN ADMINISTERED MEDICINALLY.

A curious phenomenon, described by Sir Benjamin Ward Richardson, in the *Asclepiad*, No. 42, vol. 2, is observable in regard to the tongue when peroxide of hydrogen is administered for long periods in medicinal doses. The tongue under the administration becomes moist and of milky whiteness, the fur, as it is commonly called, becoming whiter than cream. At first I thought this appearance might be connected with disease, although to my eye it was novel; but it has recurred so steadily now for so many times after the peroxide administration there can be no doubt as to its being the effect of a definite cause. It has been most

manifested in cases of enteric fever, in which the medicine has been given in two-drachm doses of 10 volumes' strength, well diluted, every four or six hours for several days, and it is a good sign that the medicine is taking effect. No harm is indicated by the appearance, but it is a usual proof of a favorable condition with breath free of taint, and the teeth of sor-des. After the medicine is withdrawn the white condition clears off, in six or seven days, leaving a moist and clean surface.

SUBCUTANEOUS INJECTION OF OIL IN CASES OF STIFFENED JOINTS.

In two instances of stiffened joints where the inability to move the limb has appeared to arise from rigidity of the tendons and muscular sheaths, I have injected, subcutaneously, olive oil into the structures, and with some success. I find that a fluid drachm of oil can be injected around the knee joint without causing any after inflammation or discomfort. In one instance where the elbow was operated on in this way the patient, a young woman, obtained for the first time some degree of movement after six months' entire fixation from rigidity.—Dr. B. W. Richardson in the *Asclepiad*.

HEMATOPORPHYRIN IN NORMAL URINE.

Hematoporphyrin, which is sometimes excreted in large amount in the course of some diseases, has been shown to be sometimes present in normal urine. Garrod (*Journ. of Phys.*, December, 1894) gives the results of his observations on the urine of 20 normal individuals in good health. Both acid and alkaline extracts of hematoporphyrin were prepared and examined by the direct vision spectroscope. The presence of the two absorption spectra under the different conditions (acid and alkaline) confirmed the presence of hematoporphyrin, which was found in every one of the 20 cases. Garrod concludes that this substance is present normally in urine, but that it is sometimes in such small quantity as to escape detection.

THE PATHOLOGICAL ANATOMY OF ATROPHIC CIRRHOSIS OF THE LIVER.

Sieveking (*Centralbl. f. allg. Path.*, December 31, 1894) publishes the results of the microscopical examination of the liver in 20 well-marked cases of atrophic cirrhosis (chiefly alcoholic). The object of the pathological examination was to determine (1) whether the connective tissue development in the liver is of one definite type; (2) whether the atrophy and degeneration of the liver cells appears to cause the connective tissue proliferation, or whether the latter may be regarded as the primary process; (3) whether the connective tissue proliferation occurs in the spleen as well as in the liver; and whether the increased consistence and enlargement of the spleen may be explained thereby. Sieveking found (1) that the proliferated connective tissue infiltrated the liver substance in quite an irregular manner. In some parts the newly-developed connective tissue was inter-acinous, in other parts intra-acinous. The tracts of connective tissue were sometimes broad, sometimes narrow. In some parts a lobule was divided by tracts of connective tissue into larger or smaller groups of liver cells; in other parts, fine fibres of connective tissue surrounded each liver cell. The variations were so numerous that no particular type of connective tissue proliferation could be recognized; (2) in no place did the liver cells show signs of atrophy or degeneration unless surrounded by tracts of connective tissue. The fine fibres of connective tissue ended freely between the normal liver cells; only when the connective tissue encircled separate cells or small groups of cells did atrophy occur; hence the author regards the proliferation of connective tissue as the primary change; (3) in the spleen, the capsule, the arborescences and the sheaths of the vessels were thickened; in various parts the pulp network was widened, and lymphoid elements clustered in the same and around the vessels. These changes the author regards as the result of congestion. No proliferation of connective tissue could be detected.